

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

# The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

01/26/2012

Larry Bates Assistant District Attorney, Suffolk County

Dear ADA Bates,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples

4. Analysis sheets with custodial chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

## Khan, Annie (DPH)

From:

Khan, Annie (DPH)

Sent:

Thursday, January 12, 2012 12:12 PM

To:

Bates, Larry (SUF); Corbett, Kate (DPH)

Subject: RE: Lab Notes and Summons BMC Docket Number

Hi Larry,

Hope this email finds you well.

Lab #

Upon reviewing this case, the Lab#s may be incorrect.

At your convenience, could you please check if these are the correct Lab#s?

Sorry for the inconvenience.

Process of

Thanks.

Annie

Drug Analysis Lab 617-983-6622 (work)

617-983-6625 (fax)

From: Bates, Larry (SUF)

Sent: Wednesday, January 11, 2012 2:58 PM To: Khan, Annie (DPH); Corbett, Kate (DPH)

**Subject:** Lab Notes and Summons BMC Docket Number

case

**Greetings Once More** 

Attached please find a summons for your appearance on the above given case at BMC for Feb 15. Request is also made for you forward a copy of lab notes for case number and should you not be able to attend the court date, please notify me. Lastly, thank you for your assistance.

Larry Bates

#### Curriculum Vitae

#### Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry

University of Massachusetts, Boston, Ma, Bachelor of Science

Major: Biochemistry Minor: Economics

#### Experience:

2003 - present

#### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Writing of the Standard Operating Procedures (SOPs) and Protocols.
- \*Responsible for the Quality Control and Quality Assurance of analytical instruments, reagents and controls/standards.
- \*Maintenance and repairs of analytical instruments.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court.
- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health.
- \*Notary Public.

2001 - 2003

#### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MBL Quality Control and Quality Assurance Department for the Food and Drug Administration.
- \*Method Development for creating new techniques for the QC Dept. and FDA.
- \*Writing, revising and reviewing the Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Courses:**

### **Department of Justice - Forensics Professionals**

Introduction to Forensic Drug Chemistry

Chemical Spot Test and Mechanism for Illicit Drugs

Forensic Mass Spectrometry

Forensic Science 101: An Introduction

Fundamentals of Forensic Questioned Documents

Perspectives in Expert Testimony

**Evidence Analysis** 

Ethics in Forensic Science

Transition to Leadership

Fundamentals of Forensic Toxicology

### Additional Trainings:

Good Laboratory Practice/Good Manufacturing Practice (GLP/GMP) training with Massachusetts Biologic Laboratory.

Quality Control/Quality Assurance (QC/QA) training according to FDA Codes and Regulations.

Gas Chromatography (GC) and Gas Chromatography/Mass Spectrometry (GC/MS) trainings with Agilent Technologies and Restek.

High Power Liquid Chromatography (HPLC) and HPLC/MS/MS trainings with Waters Cooperation.

Fourier Transform Infrared Spectroscopy (FTIR) training with Spectros and Spectum One.

Ultraviolet-Visible Spectroscopy (UV-Vis) training with Agilent Technologies and Beckman.

Total Organic Carbon Analyzer (TOC) training with MBL and Sievers.

### Associations:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

### Kate A. Corbett

## Education

# Bachelor of Science Degree, CHEMISTRY May 2003

MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

## **Employment**

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

## Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

**Drug Analysis Laboratory** 

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

### Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

### Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

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DRUG	RECEIP	T							
		,	ſ		_				

DOSIONE DE PARTMENT DRUG RECEIPT	CC # BOOK #_ PAGE #_		
	DESTRUCTION #		4 10M M
District/Unit D-4 DCU			
Name & Rank of Arresting Officer 591 Det	Keenan	ID# 1065	2
DEFENDANT'S NAME	ADDRESS	CITY	STATE
,		LAB USE	
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER
White rock (crack cocaine)	2 p/6/s	4 21	
,		11209	
shite pills (800 mg Gasapentin)	40 pills	0187g	
in powder (Heroin)	46 G/B'S	57,89a	
	•		
*			<b></b>
			AANA 4 1100
	CONTROL CONTRO	**************************************	00-300-300-300-00-00-00-00-00-00-00-00-0
To be completed by ECU personnel only			
Name and Rank of Submitting Officer Submitting	While	ID#//00	G.
		ID#	, — 3//
Received by		ECU Control #	

Date Analyzed: < City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def: Amount:

Subst: SUB

No. Cont:

Cont: pb 2

Date Rec'd: 02/03/2011

No. Analyzed: \

Gross Wt.:

4.36

Net Weight: 0 · 16

#Tests: 6 ASD

Prelim: cocure &

Findings:

Date Analyzed: ロラーマレーハ

City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def: Amount:

No. Cont:

40.0 1

Cont: pb

Date Rec'd: 02/03/2011

Gross Wt.:

20.29

No. Analyzed:

Net Weight:

#Tests: \AT

Subst: TAB

Prelim: &

Findings: optocoper to

Date Analyzed:

City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def:

Amount:

Subst: SUB

No. Cont:

46

Cont: gb

Date Rec'd: 02/03/2011

No. Analyzed: 5

Gross Wt.: 57.89

Net Weight: 0.86

# Tests: 25 AS D

Prelim: Heron

# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY BOE	ANALYST	B>9
No. of samples tested:	-	Evidence Wt.	
PHYSICAL DESCRIPTION:		Gross Wt(ح):_	0.3721
Off white chu	ILL BUDGLOSC	Gross Wt (	0.2126
	2602		750000000000000000000000000000000000000
		Net Wt:	0.1640
		•	
			•
	-		
PRELIMINARY TESTS			
Spot Tests		Microcrystalline Tes	<u>ts</u>
Cobalt Thiocyanate <u>( ─) </u> <del>↓</del>		Gold Chloride +	
Marquis	,	TLTA (-) +	·
Froehde's		OTHER TESTS	•
Mecke's			and the second s
			-ф-
	•		30000.00.30000000000000000000000000000
PRELIMINARY TEST RESULTS		GC/MS CONFIRMATORY	
RESULTS COCANO		RESULTS COCCUR	
DATE 2-8-11		MS OPERATOR KAC	
		DATE 2-10-11	

# DRUG POWDER ANALYSIS FORM

SAMPLE #	AGENCY BOSED.	ANALYST AND
No. of samples tested:		Evidence Wt.
PHYSICAL DESCRIPTION:		Gross Wt( ):
40 while	00al 1abet	Gross Wt ( ):
17	/62	Pkg. Wt:
		Net Wt: 51.2238
रूपपंपप (	800	
PRELIMINARY TESTS Spot Tests		Microcrystalline Tests
Cobalt Thiocyanate ()		Gold oride
Marquis		rlta <u>( )</u>
Froehde's		OTHER TESTS
Mecke's		max a (F)
PRELIMINARY TEST RESULTS	<u>GC/N</u>	AS CONFIRMATORY TEST
RESULTS gaba geom	RESU	JLTS
DATE 3.26-11	•	MS TOR
	r	DATE

# **Drug Information**

**DRUG NAME: GABAPENTIN** 

**INGREDIENTS: GABAPENTIN -- 800 MG** 

Color: White Shape: Oval

imprint: 4444 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the reverse side., Hourglass 4444 800 The tablet is debossed with a hourglass logo and 4444 on one side and 800 on the

reverse side., 800
Form: Oral Tablet

Available-Container-Size: Bottle of 100, Bottle of 500, Strip of 100, Bottle

of 1000

AAPCC Code: 077730 - Other Types

of Anticonvulsant (Excluding

Barbiturates)

NDC: 0093-4444-01 0093-4444-05 0172-4444-60 0172-4444-70

0172-4444-10

Excipients: Lactose (Monohydrate); Cellulose,

Microcrystalline; Polyethylene Glycol

Regulatory Status: RX
Availability: United States

**Product ID** 6738350

Contact: Teva Pharmaceuticals

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# DRUG POWDER ANALYSIS FORM

SAMPLE # AGENCY	Boero	ANALYST <sub>.</sub>	420
No. of samples tested: 5		Evidence Wt.	
PHYSICAL DESCRIPTION:	Gro	oss Wt (4S):	9.7000
Beige powdred substa	an e Gra	oss Wt(5): _	1-0902
17 46 00	S	Pkg. Wt:	
		Net Wt:	
, do ember -> vote	weighed.		
			·
PRELIMINARY TESTS Spot Tests	Micro	crystalline Tes	ts
Cobalt	Gold		
5 Thiocyanate ( +)	Chloride_		-
S Marquis +	TLTA	)	
5 Froehde's +	<u>01</u>	HER TESTS	
5 Mecke's +	5GC+	***************************************	
	3664	,	
	***************************************		· · · · · · · · · · · · · · · · · · ·
PRELIMINARY TEST RESULTS	GC/MS CO	NFIRMATORY	TEST
RESULTS LENON	RESULTS	Henov	<b></b>
DATE 2-08-11	MS		
	OPERATOR _		
	DATE	2-16-11	

# samples tested: 5

#	Gross Welght	Packet Weight	. Net Weight	#	Gross Weight	Packet Weight	Net Weight
1	0.2187	0.1957	0.0180	26			
2	0.2143	0.2007	0.0136	27			
3	0.2164	0.1989	0.0175	28			
4	0.2311	0.2021	0.0290	29	•		,
5	0.2227	0.2063	0.0164	30			
6				31			
7				32	***************************************		-
8				33			
9	180000000000000000000000000000000000000		140000000000000000000000000000000000000	34			
10			† 4110-1000000000000000000000000000000000	35	**************************************		•
11			***************************************	36			
12	·		MCMANAGANA Abban e e e e e e e e e e e e e e e e e e e	37	PROCESSION		
13				38	***************************************		
14			MANAGA MARANA	39	Personance		
15			110000000000000000000000000000000000000	40	·		
16				41	noncontrol de la company d		
17				42			
18				43			
19			994000454	44			
20	200000000000000000000000000000000000000			45			
21				46			
22			An	47			
23				48	000000 di 4 t 4 t - 000000000 k MANA		
24			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	49			
25	ations:			50	20000000000000000000000000000000000000		

Calculations:

VKAC 1/25/12

Information from Data File:

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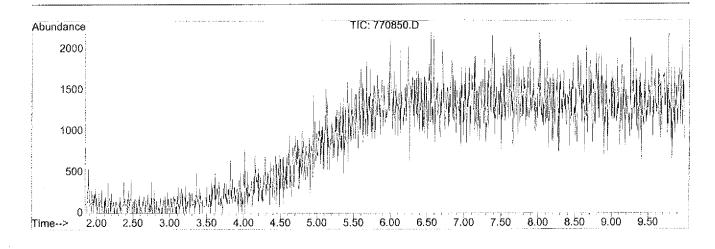
Operator : SLD

Date Acquired : 9 Feb 2011 21:22

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

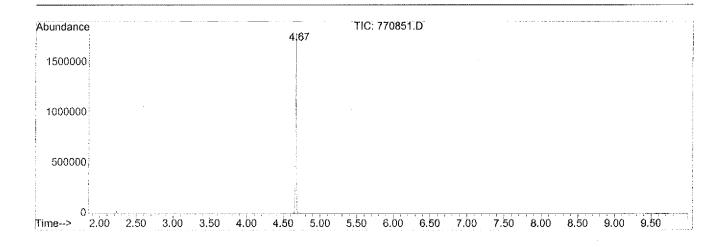
File Name : D:\SYSTEM4\02 09 11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD Submitted by

Vial Number 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.666	1636731	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770851.D

Operator : SLD

Date Acquired : 9 Feb 2011 21:35

Sample Name : COCAINE STD

Submitted by :

Vial Number : 51 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

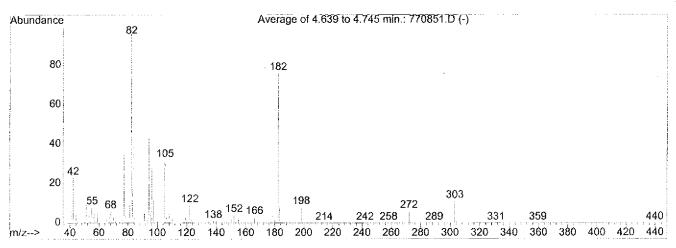
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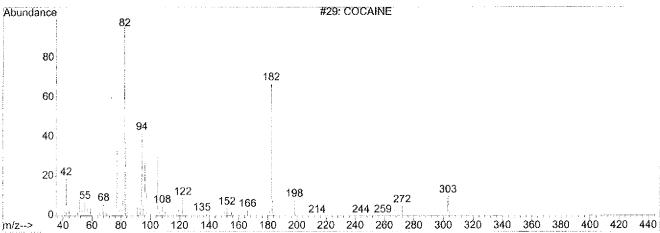
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
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770851.D

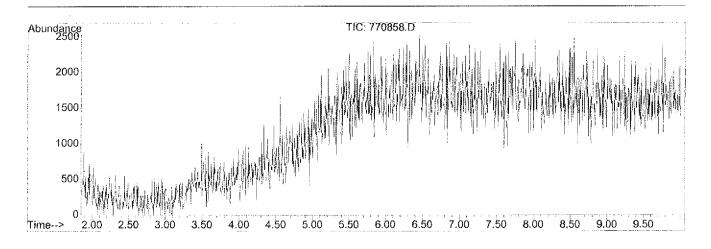
Wed Jan 25 11:21:05 2012

File Name : D:\SYSTEM4\02\_09\_11\770858.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:12

Sample Name : BLANK Submitted by : ASD Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

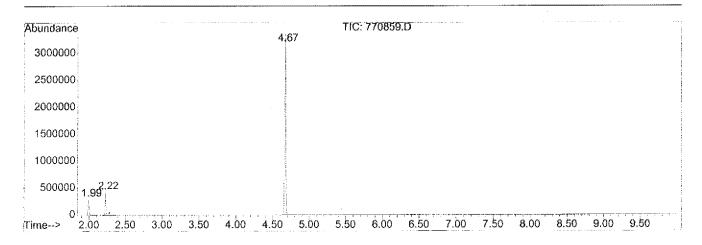
File Name : D:\SYSTEM4\02\_09\_11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
1.992	295989	6.99	8.31	
2.225	3 <b>72</b> 895	8.81	10.46	
4.668	3563840	84.20	100.00	

770859.D

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :|

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

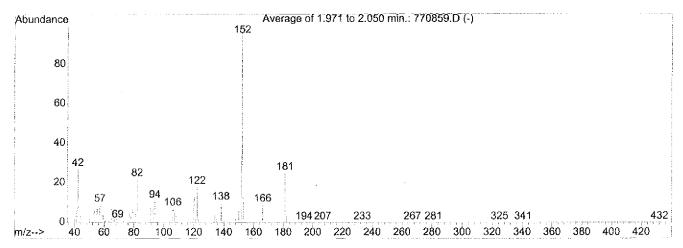
Minimum Quality: 90

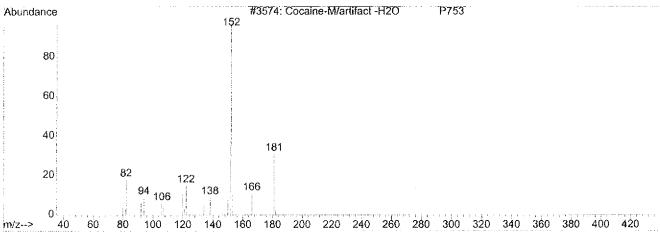
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
 1	1.99	C:\DATABASE\PMW_TOX2.L Cocaine-M/artifact -H2O		000000-00-0	96
		MDA-M (desmethylenyl-methyl-)	ME	@ 000000-00-0	37
		Metipranolol-M/artifact AC		000000-00-0	32





770859.D

Wed Jan 25 11:21:20 2012

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name :

Submitted by : ASD Vial Number : 59 AcquisitionMeth: DRUGS Integrator : RTE

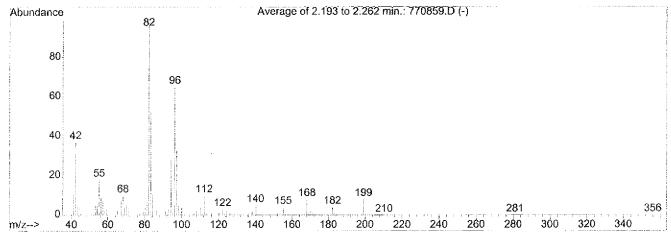
Search Libraries: C:\DATABASE\SLI.L

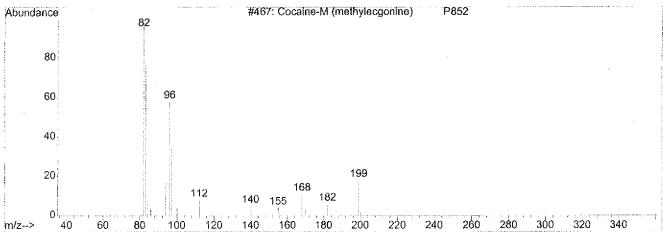
BASE\SLI.L Minimum Quality: 90
BASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\PMW\_TOX2.L

C:\DATABASE\NIST98.L

PK# RT	Library/ID	CAS#	Qual
2 2.22	C:\DATABASE\PMW_TOX2.L Cocaine-M (methylecgonine) Cocaine Cocaine-M (methylecgonine) AC	007143-09-1 000050-36-2 000000-00-0	96 38 9





770859.D

Wed Jan 25 11:21:21 2012

File Name : D:\SYSTEM4\02 09 11\770859.D

Operator : SLD

Date Acquired : 9 Feb 2011 23:26

Sample Name

3

Submitted by : ASD
Vial Number : 59
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

000050-36-2

C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

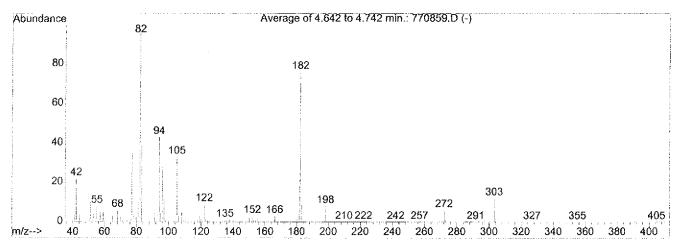
99

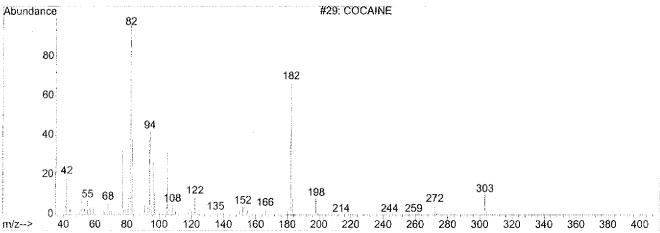
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

4.67 C:\DATABASE\SLI.L

COCAINE





770859.D

Wed Jan 25 11:21:22 2012

File Name : D:\SYSTEM4\02\_09\_11\770862.D

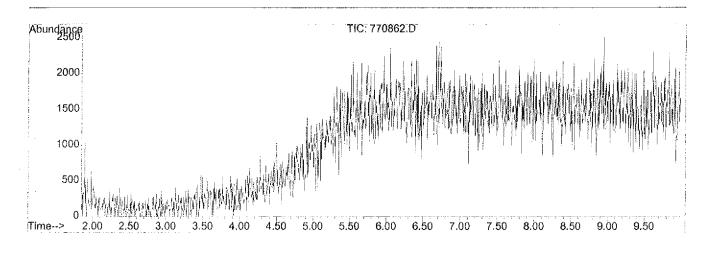
Operator : SLD

Date Acquired : 10 Feb 2011 00:07

Sample Name : BLANK

Submitted by

Vial Number 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : D:\SYSTEM4\02\_09\_11\770863.D

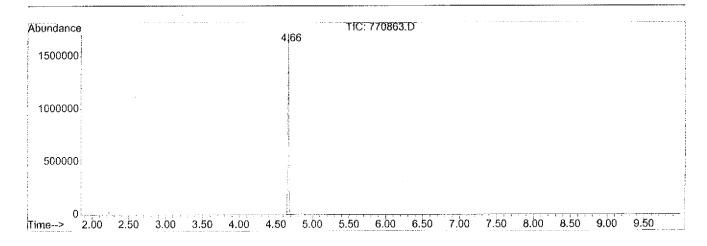
Operator : SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name : COCAINE STD

Submitted by

Vial Number 51 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.663	1728398	100.00	100.00

File Name : D:\SYSTEM4\02 09 11\770863.D

Operator SLD

Date Acquired : 10 Feb 2011 00:21

Sample Name

COCAINE STD Submitted by

Vial Number 51 AcquisitionMeth: DRUGS : RTE Integrator

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90 Minimum Quality: 90

C:\DATABASE\PMW\_TOX2.L C:\DATABASE\NIST98.L

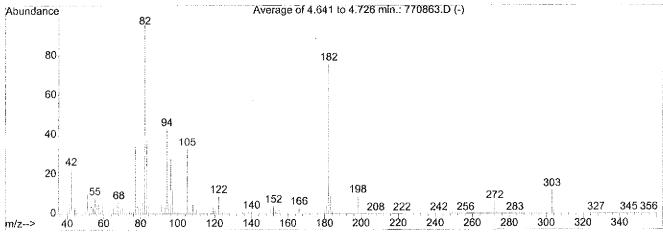
CAS# PK# RTLibrary/ID Qual

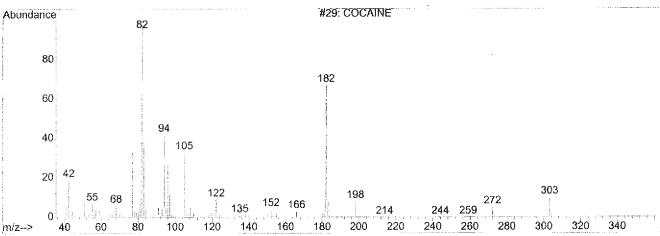
C:\DATABASE\SLI.L 1 4.66

COCAINE

000050-36-2

99





770863.D

Wed Jan 25 11:21:34 2012

#### Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q1-2011\System7\02\_15\_11\771904.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:25

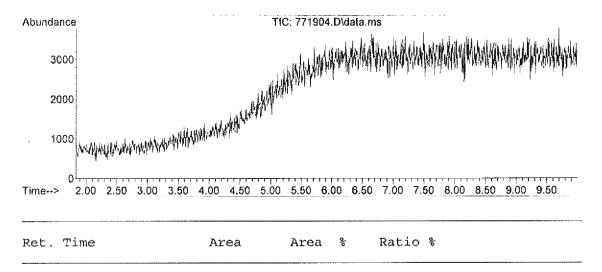
Sample Name : BLANK

Submitted by

Vial Number

1 AcquisitionMeth: DRUGS.M

Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011

Sample Name :

: HEROIN STD

Submitted by

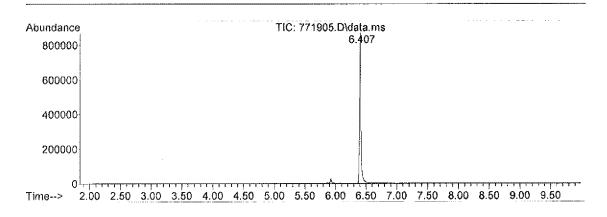
.

Vial Number :

5

AcquisitionMeth: DRUGS.M

Integrator : RTE



9:38

Ret. Time	Area	Area %	Ratio %
6.407	1376028	100.00	100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771905.D

Operator : KAC

Date Acquired : 15 Feb 2011 9:38

Sample Name

: HEROIN STD

Submitted by

Vial Number

AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

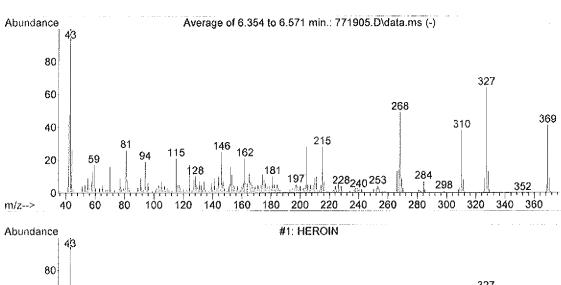
PK# RT CAS# Qual Library/ID

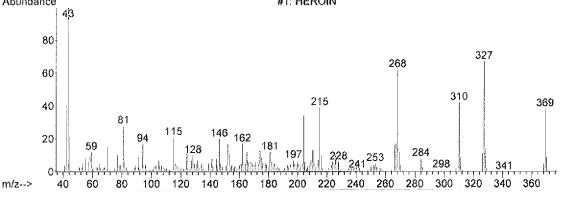
6.41 C:\Database\SLI.L 1

HEROIN

000561-27-3

99



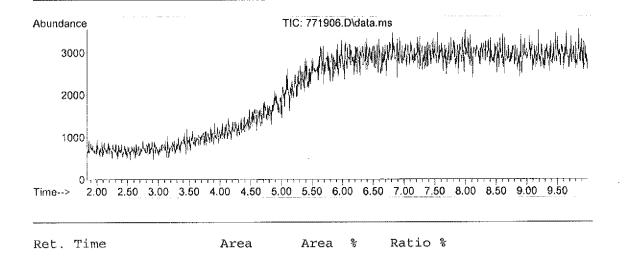


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Operator : KAC

Date Acquired : 15 Feb 2011

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



9:51

\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

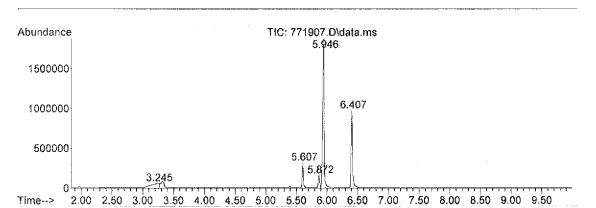
Date Acquired : 15 Feb 2011 10:03

Sample Name : Submitted by :

: ASD

Vial Number : 7 AcquisitionMeth: DRUGS.M

Integrator : RTE



Ratio %	Area %	Area	Ret. Time
16.45	8.71	512102	3.245
14.15	7.49	440354	5.607
7.95	4.21	247462	5.872
100.00	52.91	3112744	5.946
50.44	26.69	1570135	6.407

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name :

Submitted by : ASD Vial Number : 7

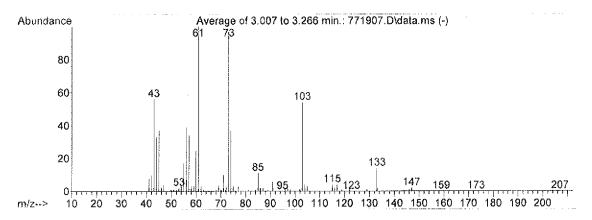
AcquisitionMeth: DRUGS.M Integrator : RTE

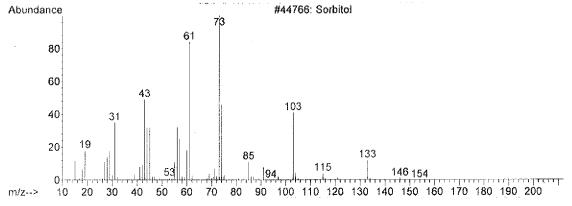
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1.	3.25	C:\Database\NIST05a.L Sorbitol Sorbitol Sorbitol	000050-70-4 000050-70-4 000050-70-4	87 86 80





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired 15 Feb 2011 10:03

Sample Name

Submitted by ASD Vial Number

AcquisitionMeth: DRUGS.M Integrator : RTE

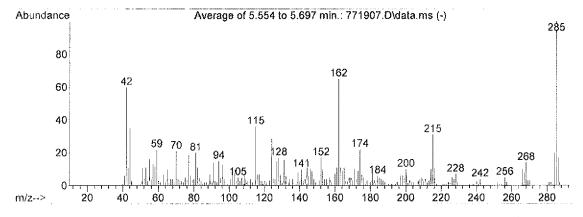
C:\Database\SLI.L Minimum Quality: 80 Search Libraries: Minimum Quality: 80

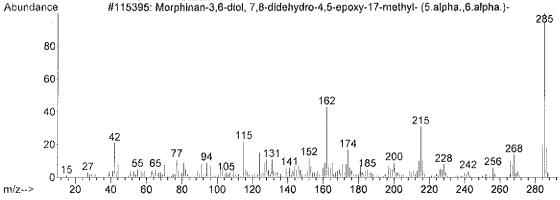
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

	PK#	RT	Library/ID		CAS#	Qual
_	2	5.61	C:\Database\NIST05a.	L.		
			Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
			Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2





99

: F:\Q1-2011\System7\02\_15\_11\771907.D File Name

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name

Submitted by ASD

Vial Number AcquisitionMeth: DRUGS.M RTE Integrator

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

1000153-00-1

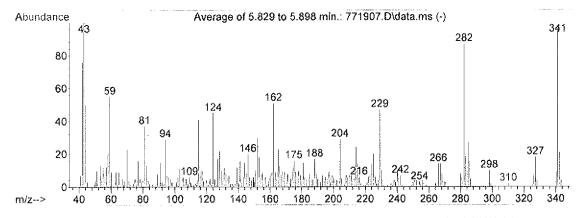
92

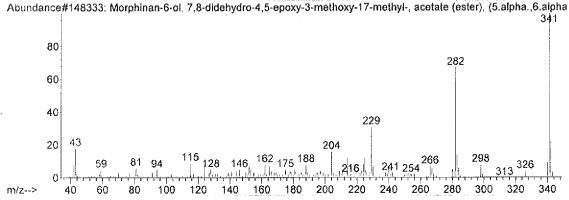
C:\Database\NIST05a.L

Morphin, 3-acetyl-

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Quai
3	5.87	C:\Database\NIST	05a.L	***************************************	
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	97
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	97





File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

: RTE

Sample Name

Integrator

ASD

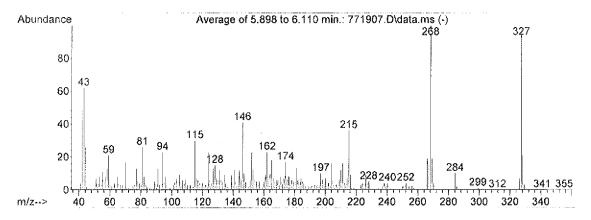
Submitted by Vial Number AcquisitionMeth: DRUGS.M

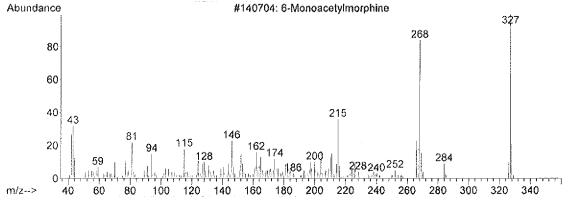
C:\Database\SLI.L Minimum Quality: 80 Search Libraries:

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8	99 99





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02\_15\_11\771907.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:03

Sample Name

Submitted by ASD Vial Number

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

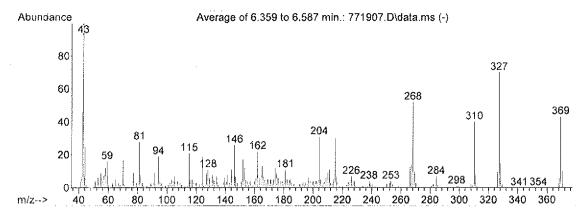
Minimum Quality: 80 Minimum Quality: 80

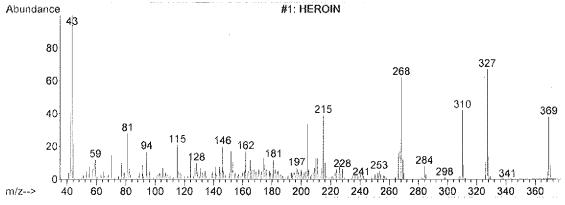
C:\Database\NIST05a.L C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN 000561-27-3 99





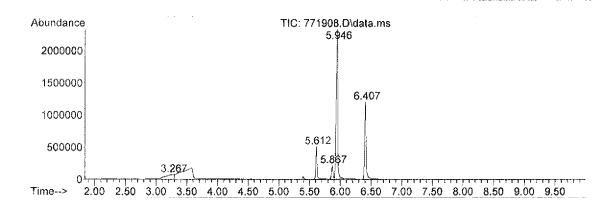
File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE



Area	Area %	Ratio %	
629037	8.12	15.08	
699390	9.03	16.76	
334629	4.32	8.02	
4172296	53.88	100.00	
1908470	24.65	45.74	
	629037 699390 334629 4172296	629037 8.12 699390 9.03 334629 4.32 4172296 53.88	629037 8.12 15.08 699390 9.03 16.76 334629 4.32 8.02 4172296 53.88 100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

: KAC Operator

Date Acquired : 15 Feb 2011 10:16

Sample Name Submitted by

Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

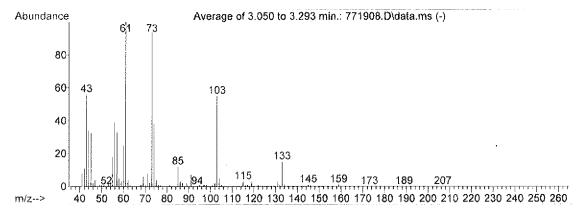
Search Libraries:

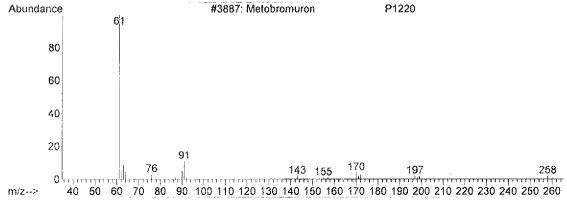
C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.27	C:\Database\PMW_TOX2.L Metobromuron Myristic acid Monolinuron	003060-89-7 000544-63-8 001746-81-2	4 2 2





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired 15 Feb 2011 10:16

Sample Name

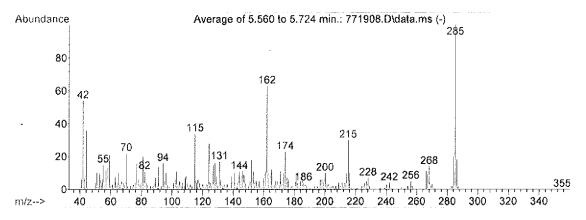
Submitted by ASD Vial Number 8 AcquisitionMeth: DRUGS.M Integrator : RTE

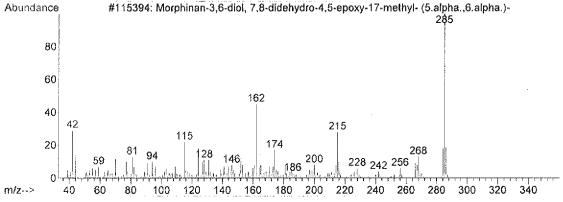
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a. Morphinan-3,6-diol, Morphinan-3,6-diol, Morphinan-3,6-diol,	7,8-didehydro-4 7,8-didehydro-4	000057-27-2	99 99 99





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name :

Submitted by : ASD Vial Number : 8

AcquisitionMeth: DRUGS.M Integrator : RTE

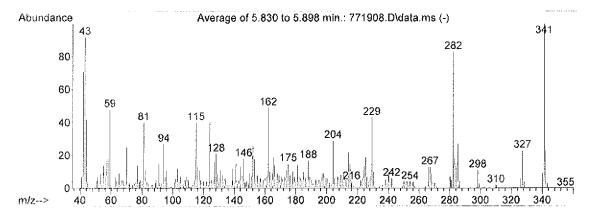
Search Libraries: C:\Databa

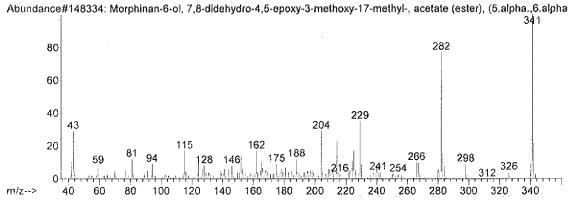
C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
3	5.87	C:\Database\NIST	05a.L		
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Morphinan-6-ol,	7,8-didehydro-4,5-e	006703-27-1	99
		Acetylcodein		1000153-00-2	98





Minimum Quality: 80

File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : | Submitted by :

: ASD

Vial Number : 8 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

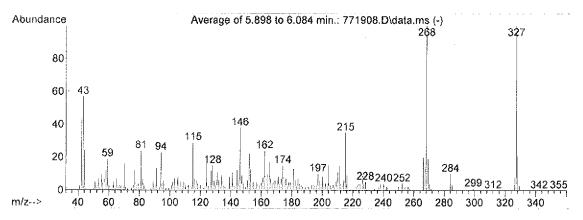
Minimum Quality: 80

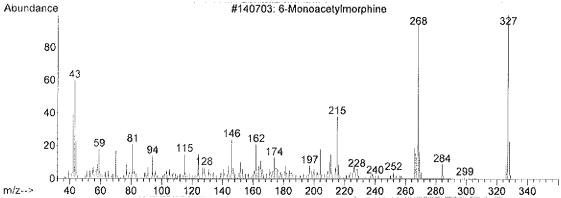
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

•	PK#	RT	Library/ID	CAS#	Qual
	4	5.95	C:\Database\NIST05a.L		
			6-Monoacetylmorphine	002784-73-8	99
			6-Monoacetylmorphine	002784-73-8	99
			6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771908.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:16

Sample Name : Submitted by : AS

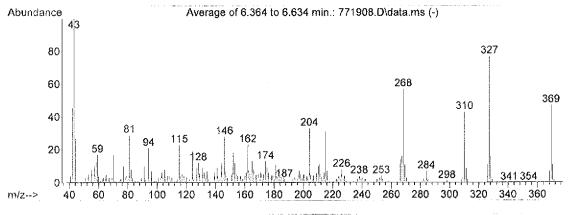
Submitted by : ASD
Vial Number : 8
AcquisitionMeth: DRUGS.M
Integrator : RTE

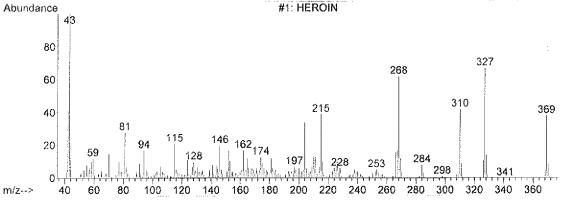
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual.
5	6.41	C:\Database\SLI.L HEROIN JWH-073	000561-27-3 208987-48-8	99 2





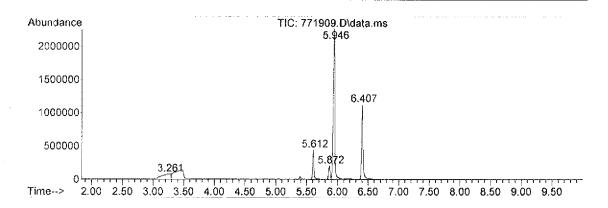
File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.261	724023	9.61	18.01	
5,613	634422	8.42	15,78	
5.872	325760	4.32	8.10	
5.946	4020959	53.36	100.00	
6.407	1830160	24,29	45.52	

File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD Vial Number : 9

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: (

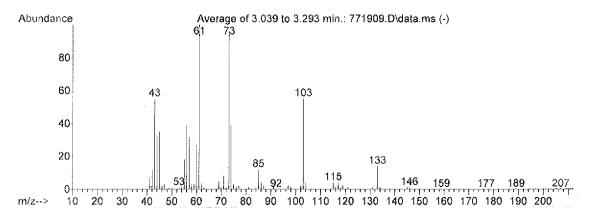
C:\Database\SLI.L

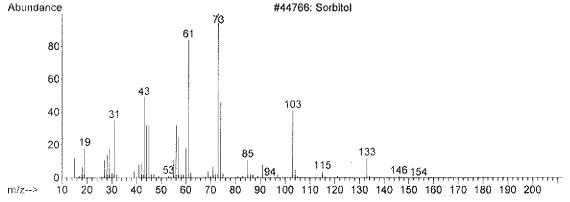
Minimum Quality: 80

C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

\NISTO5a.L Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
1	3.26	C:\Database\NIST05a.L		**
		Sorbitol	000050-70-4	87
		D-Mannitol	000069-65-8	78
		Sorbitol	000050-70-4	64





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

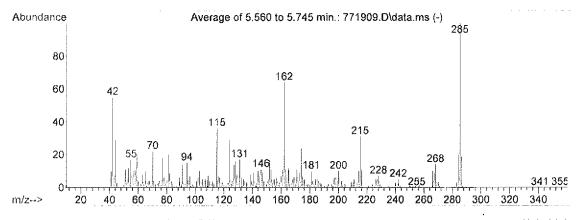
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

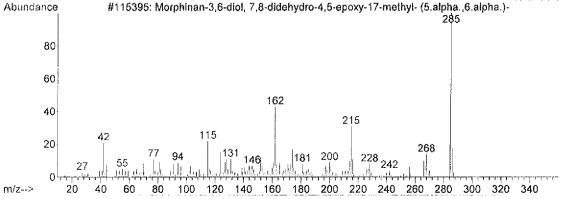
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
 2	5.61	C:\Database\NIST05a.L		
		Morphinan-3,6-diol, 7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol, 7,8-didehydro-4	000057-27-2	99

Morphinan-3,6-diol, 7,8-didehydro-4 000057-27-2





Minimum Quality: 80

99

File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired 15 Feb 10:28

Sample Name Submitted by

ASD q

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

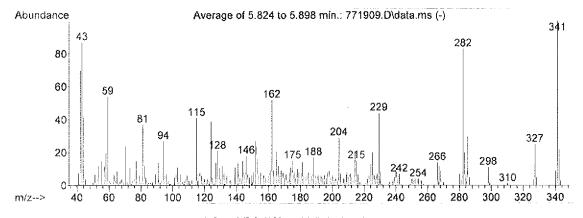
C:\Database\NIST05a.L

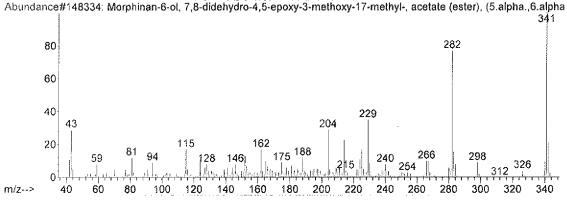
C:\Database\PMW TOX2.L

PK# RTCAS# Library/ID Qual

3 5.87 C:\Database\NIST05a.L

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 99 1000153-00-2 95 Acetylcodein





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

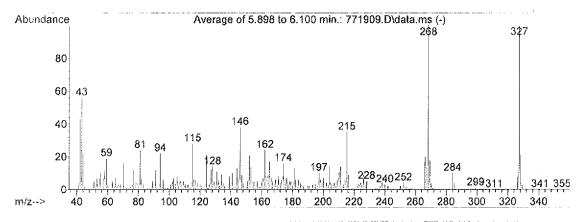
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS.M
Integrator : RTE

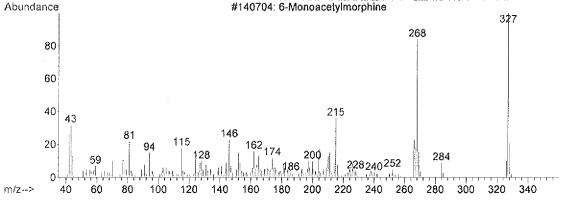
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L 6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99
		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771909.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:28

Sample Name :

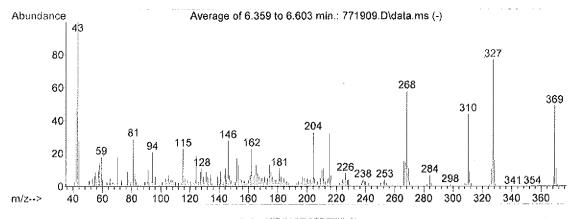
Submitted by : ASD Vial Number : 9

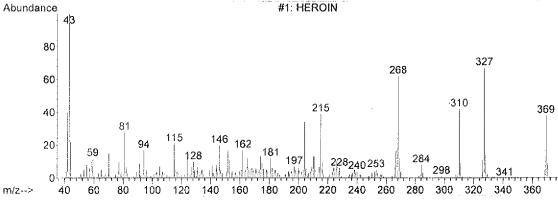
AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L





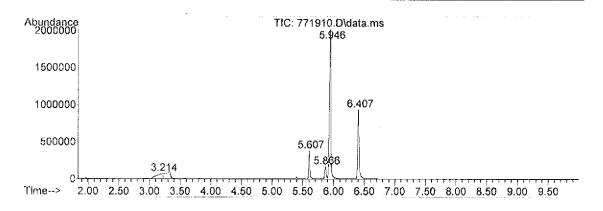
File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.214	497068	7.96	14.52	
5.607	526511	8.43	15.38	
5.866	266490	4.27	7.79	
5.946	3422257	54.80	100.00	
6,407	1532774	24.54	44.79	

File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

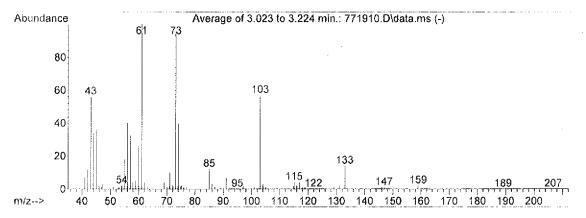
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

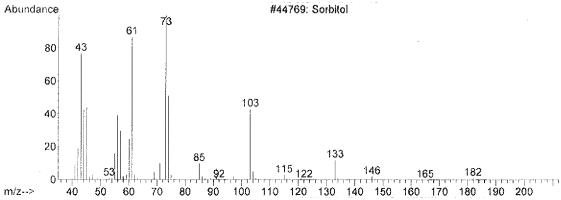
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

 PK#	RT	Library/ID	CAS#	Qual
1	3.21	C:\Database\NIST05a.L Sorbitol Sorbitol Sorbitol	000050-70-4 000050-70-4 000050-70-4	80 72 72





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

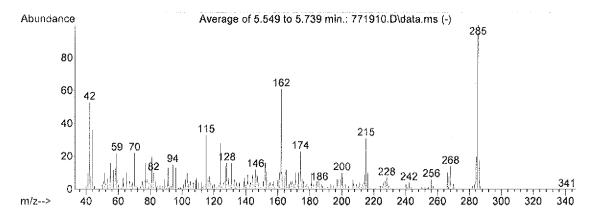
Submitted by : ASD
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

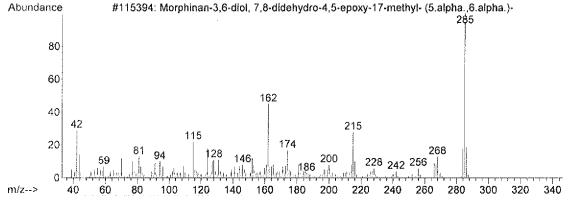
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
2	5.61	C:\Database\NIST05a.	L		
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol,	7,8-didehydro-4	000057-27-2	99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name :

Submitted by :
Vial Number : 10
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

> 99 99

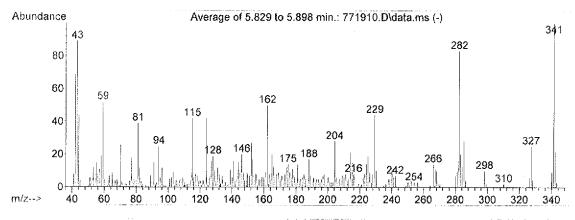
> > 95

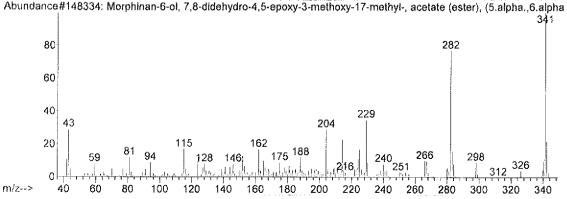
C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

3 5.87 C:\Database\NIST05a.L Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1

Acetylcodein 1000153-00-2





File Name : F:\Q1-2011\System7\02 15 11\771910.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:41

Sample Name

Submitted by Vial Number 10 ; AcquisitionMeth: DRUGS.M Integrator : RTE

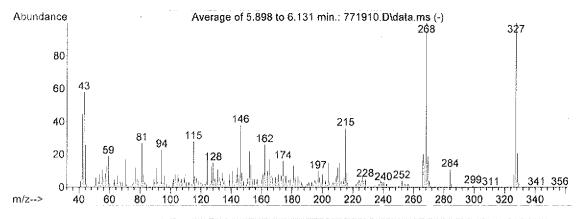
Search Libraries: C:\Database\SLI.L

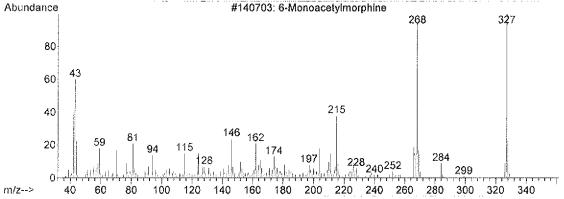
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

Minimum Quality: 80 Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
4	5,95	C:\Database\NIST05a.L 6-Monoacetylmorphine 6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8 002784-73-8	99 99 99





File Name : F:\Q1-2011\System7\02\_15\_11\771910.D

Operator : KAC

10:41 Date Acquired 15 Feb

Sample Name

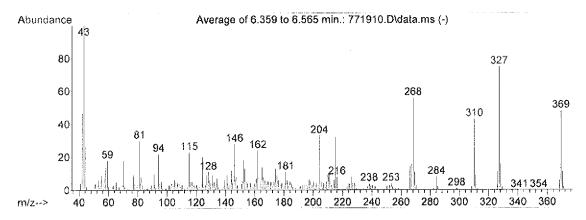
Submitted by Vial Number 10 : AcquisitionMeth: DRUGS.M : RTE Integrator

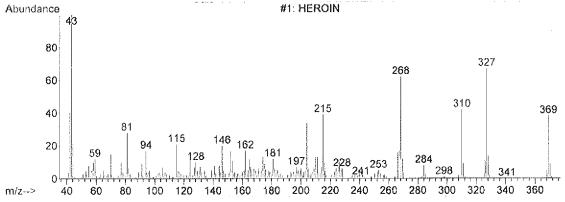
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
5	6.41	C:\Database\SLI.L HEROIN JWH-073	000561-27-3 208987-48-8	99





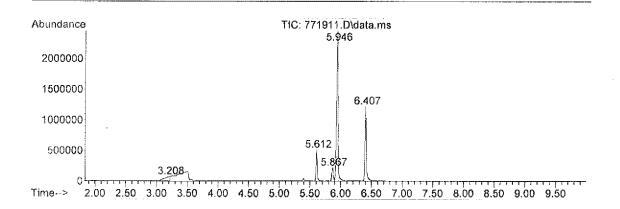
File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.208	404964	5.32	9.62	
5.612	713169	9.37	16.94	
5.867	351629	4.62	8.35	
5.946	4210108	55.33	100.00	
6.407	1928628	25.35	45.81	

File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

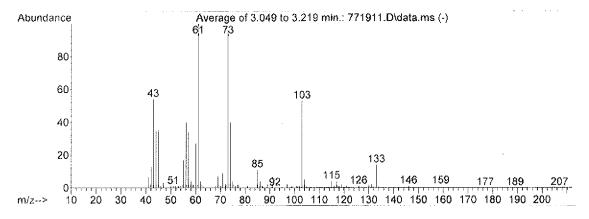
Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M
Integrator : RTE

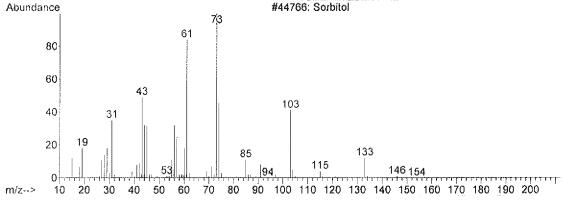
Search Libraries: C:\Database\SLI.L

L:\Database\SLI.L Minimum Quality: 80
L:\Database\NIST05a.L Minimum Quality: 80

C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

PK# CAS# RT Library/ID Qual 3.21 C:\Database\NIST05a.L 000050-70-4 Sorbitol 87 Sorbitol 000050-70-4 86 D-Mannitol 000069-65-8 83





File Name : F:\Q1-2011\System7\02 15 11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Submitted by AS

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

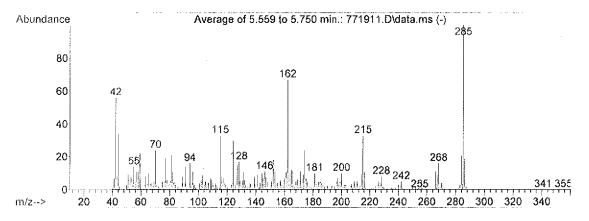
Minimum Quality: 80

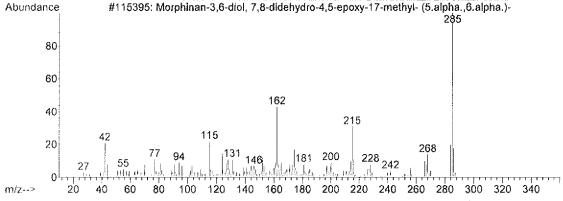
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	5.61	C:\Database\NIST05a.L		
		Morphinan-3,6-diol, 7,8-didehydro-4		99
		Morphinan-3,6-diol, 7,8-didehydro-4	000057-27-2	99
		Morphinan-3,6-diol, 7,8-didehydro-4	000057-27-2	99





: F:\Q1-2011\System7\02\_15\_11\771911.D File Name

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name

Submitted by : ASD Vial Number 11 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

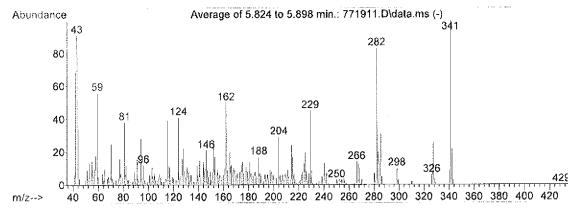
Minimum Quality: 80 Minimum Quality: 80

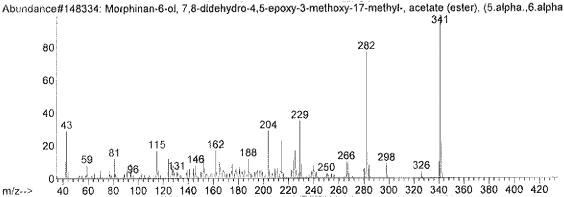
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK# CAS# Qual RT Library/ID 5.87 C:\Database\NIST05a.L 3

Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 Morphinan-6-ol, 7,8-didehydro-4,5-e 006703-27-1 99 96 1000153-00-2 95 Acetylcodein





File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired 15 Feb 2011 10:54

Sample Name Submitted by

Vial Number 11 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries:

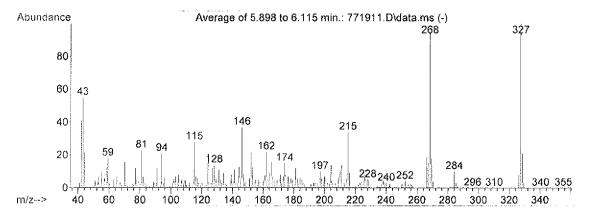
C:\Database\SLI.L

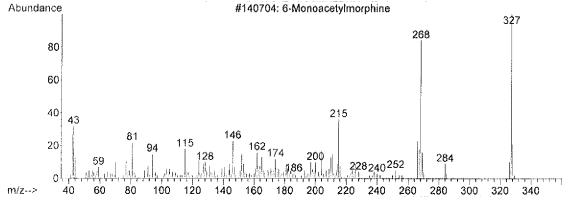
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	5.95	C:\Database\NIST05a.L	000004 80 0	
		6-Monoacetylmorphine 6-Monoacetylmorphine	002784-73-8 002784-73-8	99 99
•		6-Monoacetylmorphine	002784-73-8	99





File Name : F:\Q1-2011\System7\02\_15\_11\771911.D

Operator : KAC

Date Acquired : 15 Feb 2011 10:54

Sample Name :

Submitted by : ASD
Vial Number : 11
AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L

:\Database\SLI.L Minimum Quality: 80 :\Database\NIST05a.L Minimum Quality: 80

000561-27-3

99

2

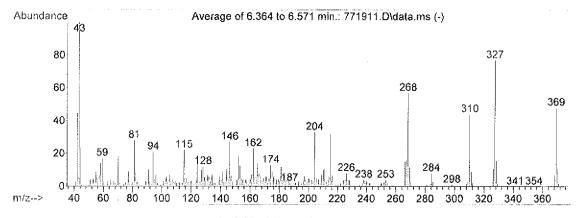
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

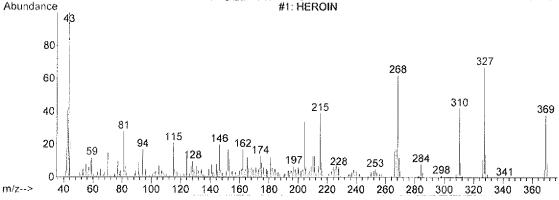
PK# RT Library/ID CAS# Qual

5 6.41 C:\Database\SLI.L

HEROIN JWH-073

H-073 208987-48-8





File Name : F:\Q1-2011\System7\02 15 11\771922.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:12

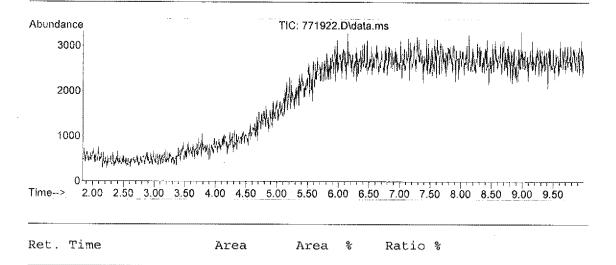
Sample Name : BLANK

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M

Integrator : RTE



\*\*\*NO INTEGRATED PEAKS\*\*\*

File Name : F:\Q1-2011\System7\02\_15\_11\771923.D

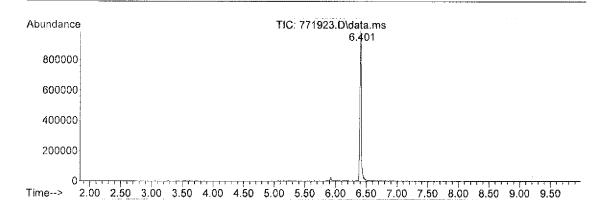
Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by :

Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.401	1598308	100.00	100.00

File Name : F:\Q1-2011\System7\02\_15\_11\771923.D

Operator : KAC

Date Acquired : 15 Feb 2011 13:25

Sample Name : HEROIN STD

Submitted by

Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

\Database\SLI.L Minimum Quality: 80 \Database\NIST05a.L Minimum Quality: 80

99

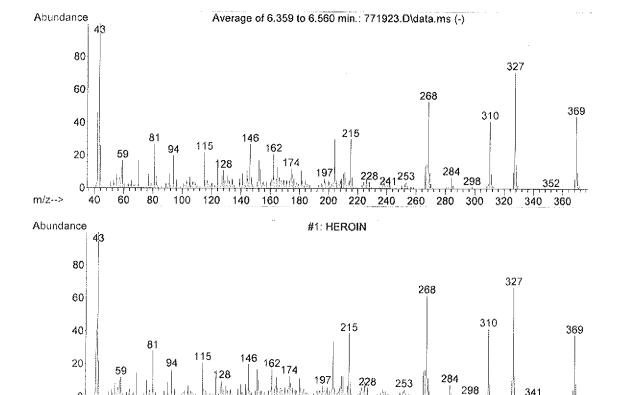
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

<del>-</del>

PK# RT Library/ID CAS# Qual

1 6.40 C:\Database\SLI.L

HEROIN 000561-27-3



m/z-->

60

100

120

140

160

180

200

220

240 260

280

40

300 320 340